

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: POWELL, Jerry S.
- (ii) TITLE OF INVENTION: HUMAN ERYTHROPOIETIN GENE: HIGH LEVEL
EXPRESSION IN STABLY TRANSFECTED MAMMALIAN CELLS
- (iii) NUMBER OF SEQUENCES: 6
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Dorsey & Whitney, LLP
 - (B) STREET: Suite 3400, 1420 Fifth Avenue, U.S. Bank Centre
 - (C) CITY: Seattle
 - (D) STATE: Washington
 - (E) COUNTRY: USA
 - (F) ZIP: 98101
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: MS-WORD
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: Not Yet Assigned
 - (B) FILING DATE: Concurrently Herewith
- (viii) PREVIOUS APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 08/466,412
 - (B) FILING DATE: June 6, 1995
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Roberts, Mark W.
 - (B) REGISTRATION NUMBER: 46,160
 - (C) REFERENCE/DOCKET NUMBER: 500582.12
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 206-903-8748
 - (B) TELEFAX: 206-903-8820

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

CCCGGTGTGG TCACCCGGCG CGCCCCAGGT CGCTGAGGGA CCCC GGCCAG
GCGCGGAGAT 60

GGGGGTGCAC GGTGAGTACT CGCGGGCTGG GCGCTCCCGC CCGCCCGGGT
CCCTGTTTGA 120

GCGGGGATTT AGCGCCCCGG CTATTGGCCA GGAGGTGGCT GGGTTCAAGG
ACCGGCGACT 180

TGTCAAGGAC CCCGGAAGGG GGAGGGGGGT GGGGCAGCCT CCACGTGCCA
GCGGGGACTT 240

GGGGGAGTCC TTGGGGATGG CAAAAACCTG ACCTGTGAAG GGGACACAGT
TTGGGGGTTG 300

AGGGGAAGAA GGT TTGGGGG GTTCTGCTGT GCCAGTGGAG AGGAAGCTGA
TAAGCTGATA 360

ACCTGGGCGC TGGAGCCACC ACTTATCTGC CAGAGGGGAA GCCTCTGTCA
CACCAGGATT 420

GAAGTTTGGC CGGAGAAGTG GATGCTGGTA GCCTGGGGGT GGGGTGTGCA
CACGGCAGCA 480

GGATTGAATG AAGGCCAGGG AGGCAGCACC TGAGTGCTTG CATGGTTGGG
GACAGGAAGG 540

ACGAGCTGGG GCAGAGACGT GGGGATGAAG GAAGCTGTCC TTCCACAGCC
ACCCTTCTCC 600

CTCCCCGCCT GACTCTCAGC CTGGCTATCT GTTCTAGAAT GTCCTGCCTG
GCTGTGGCTT 660

CTCCTGTCCC TGCTGTCGCT CCCTCTGGGC CTCCCAGTCC TGGGCGCCCC
ACCACGCCTC 720

ATCTGTGACA GCCGAGTCCT GCAGAGGTAC CTCTTGGAGG CCAAGAAGGC
CGAGAATATC 780

ACGGTGAGAC CCCTTCCCCA GCACATTCCA CAGAACTCAC GCTCAGGGCT
TCAGGGA ACT 840

CCTCCCAGAT CCAGGAACCT GGCAC TTGGT TTGGGGTGGA GTTGGGAAGC
TAGACACTGC 900

CCCCCTACAT AAGAATAAGT CTGGTGGCCC CAAACCATAC CTGGAAACTA
GGCAAGGAGC 960

AAAGCCAGCA GATCCTACGC CTGTGGCCAG GGCCAGAGCC TTCAGGGACC
CTTGACTCCC 1020

CGGGCTGTGT GCATTTCAGA CGGGCTGTGC TGAACACTGC AGCTTGAATG
AGAATATCAC 1080

TGTCCCAGAC ACCAAAGTTA ATTTCTATGC CTGGAAGAGG ATGGAGGTGA
GTTCTTTTT 1140

TTTTTTTTTT CCTTTCTTTT GGAGAATCTC ATTTGCGAGC CTGATTTTGG
ATGAAAGGGA 1200

GAATGATCGA GGGAAAGGTA AAATGGAGCA GCAGAGATGA GGCTGCCTGG
GCGCAGAGGC 1260

TCACGTCTAT AATCCCAGGC TGAGATGGCC GAGATGGGAG AATTGCTTGA
GCCCCGGAGT 1320

TTCAGACCAA CCTAGGCAGC ATAGTGAGAT CCCCCATCTC TACAAACATT
TAAAAAATT 1380

AGTCAGGTGA AGTGGTGCAT GGTGGTAGTC CCAGATATTT GGAAGGCTGA
GGCGGGAGGA 1440

TCGCTGGAGC CCAGGAATTT GAGGCTGCAG TGAGCTGTGA TCACACCACT
GAACTCCAGC 1500

CTCAGTGACA GAGTGAGGCC CTGTCTCAAA AAAGAAAAGA AAAAAGAAAA
ATAATGAGGG 1560

CTGTATGGAA TACGTTTCATT ATTCATTCAC TCACTCACTC ACTCATTCAT
TCATTCATTC 1620

ATTCAACAAG TCTTATTGCA TACCTTCTGT TTGCTCAGCT TGGTGCTTGG
GGCTGCTGAG 1680

GGGCAGGAGG GAGAGGGTGA CATCCCTCAG CTGACTCCCA GAGTCCACTC
CCTGTAGGTC 1740

GGGCAGCAGG CCGTAGAAGT CTGGCAGGGC CTGGCCCTGC TGTCGGAAGC
TGTCCTGCGG 1800

GGCCAGGCCC TGTTGGTGAA CTCTTCCCAG CCGTGGGAGC CCCTGCAGCT
GCATGTGGAT 1860

AAAGCCGTCA GTGGCCTTCG CAGCCTCACC ACTCTGCTTC GGGCTCTGGG
AGCCCAGGTG 1920

AGTAGGAGCG GACACTTCTG CTTGCCCTTT CTGTAAGAAG GGGAGAAGGG
TCTTGCTAAG 1980

GAGTACAGGA ACTGTCCGTA TTCCTTCCCT TTCTGTGGCA CTGCAGCGAC
CTCCTGTTTC 2040

CTCCTTGGCA GAAGGAAGCC ATCTCCCCTC CAGATGCGGC CTCAGCTGCT
CCTCTCCGAA 2100

CAATCACTGC TGACACTTTC CGCAAACCTCT TCCGAGTCTA CTCCAATTTC
CTCCGGGGAA 2160

AGCTGAAGCT GTACACAGGG GAGGCCTGCA GGACAGGGGA CAGATGACCA
GGTGTGTCCA 2220

CCTGGGCATA TCCACCACCT CCCTCACCAA CATTGCTTGT GCCACACCCT
CCCCCGCCAC 2280

TCCTGAACCC CGTCGAGGGG CTCTCAGCTC AGCGCCAGCC TGTCCCATGG
AACTCCAGT 2340

GCCACCAATG ACATCTCAGG GGCCAGAGGA ACTGTCCAGA GAGCAAACCTCT
GAGATCTAAG 2400

GATGTCACAG GGCCAACTTG AGGGCC

2426

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 30 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Ala Pro Xaa Arg Leu Ile Leu Asp Ser Arg Val Leu Glu Arg Tyr Leu
1 5 10 15

Leu Glu Ala Lys Glu Ala Glu Xaa Ile Thr Asp Gly Gly Ala
20 25 30

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Glu Ala Lys Glu Ala Glu Asn
1 5

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

TTYTCDGCGYT CYTTDGCTTC

20

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 6 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Glu Asn Ile Thr Asp Gly

1 5

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 23 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

AGCTCCTCCA TCAGTATTAT TTY

23

AGCTCCTCCA TCAGTATTAT TTY